

W5YI REPORT

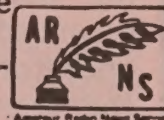
Up to the minute news from the worlds of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

Dits & Bits

Fred Maia, W5YI, Editor, P.O. Box 10101, Dallas, TX 75207

★ In This Issue ★

Packeteers Fight FCC Ruling
Foreign Broadcasts QRM Novices
U.S. Ham Testing for Aliens
New VEC Instructions Issued
Ham Instructors, Missing Link!
January VE Program Statistics
Ham Calls Issued to March 1st
On Restructuring the G.M.R.S.
Backyard Satellite Dish News
Personal Computer Happenings
LPCD's O.K'ed for 1.6-10 MHz.
Ham Swap Net Gets 20 Citations
...and much, much more



VOL. 8, Issue #6

\$1.50

PUBLISHED TWICE A MONTH

March 15, 1986

FCC OK's FM CW ID for 10 Meter Repeater Subband

On May 23, 1985, the Commission adopted a Notice of Proposed Rule Making to permit the transmission of F2A (telegraphy for aural reception) in the 10-meter repeater subband (29.5-29.7 MHz).

The NPRM was in response to a petition (RM-4880) filed by the ARRL stating that FM repeater technology can be developed more rapidly by authorizing the additional emission. The FCC said they knew of no valid reason to not approve use of F2A emission adding "We believe the state of the art has provided the means to amateur operators to engage in this type of emission." (F2A is defined as frequency modulation digital information with the use of a modulating carrier.)

The FCC did, however, ask for comments from the amateur community about any adverse effects on amateur communications that might occur by allowing FM telegraphy in the 10-meter subband. The comment period closed August 13, 1985 - replies, a month later.

Only two comments were filed. One from Robert A. Scupp, WB5YYX (Albuquerque, NM) - the other by the League. Both supported the proposal and pointed out that F2A (FM CW) is the primary emission mode used to identify amateur F3E (FM telephony) repeaters. In its comments, the ARRL suggested that the emission designator G2A

(phase-modulated telegraphy) also be shown as available for the 10-meter repeater subband. The FCC said that this was "not necessary" since the Rules already "permit both phase-modulated and frequency-modulated emission under the prefix F."

The FCC released their Order permitting FM telegraphy ID in the 10 meter repeater subband on February 26, 1986. Since no comments were received on any adverse effects, "We conclude that there will be no negative impact," the FCC ruled.

Even though both Scupp and the League stated that 29.5-29.7 MHz is the only amateur repeater subband not authorized for emission F2A, the FCC said "Actually F2A is not currently listed in §Part 97.61[a] for any repeater subband." The emission designator F2A was inadvertently omitted from those bands when emission designators were converted to the new WARC system. (They were previously listed under F2.)

"To correct this, we have editorially amended §Section 97.61[a] to show F2A in the amateur bands 50.1-54.0, 144.1-148.0, 220-225, 420-450, 902-928, 1215-1300, 2300-2310 and 2390-2450 MHz." The Commission also added the F2A emission to all amateur bands up in the Gigahertz regions. Report and Order (PR Docket 85-168) becomes effective April 23, 1986.

PACKETEERS FILE FOR RECONSIDERATION

No amateur Rule Making in memory (and probably in history) has yielded more Petitions for Reconsideration than the FCC's recent action on digital message networking.

In January the Commission ruled that automatic control for digital stations operating above 50-MHz is allowed but not unattended message routing. A repeater control operator is required to monitor and supervise the transmissions when third party traffic is being transmitted on his system.

A packet radio station is actually a miniature repeater. While nearly instantaneous, it constantly inhales and exhales high speed digital data. Called a "digipeater", it acts as an automatic relay ...data can be received and repeated again by any station that can receive the packet radio transmission. It is in this manner that a network is formed.

The FCC considered the digital message network question for over a year. A NPRM was issued last April. Even though many commenters on the Rule Making told the Commission that, due to the high transmission speed, the present third-party rules could not possibly be applied to high speed packet radio transmissions - the FCC still required that amateurs have complete control of message traffic going through their station.

The Commission refused to allow a pre-screening of third party traffic upon entrance into the network. The FCC thinking is that an amateur should be able to make a judgement as to the legality of third party traffic being handled on his radio station. Their ruling has had the effect of completely closing down packet radio message traffic on behalf of third parties - or anyone, for that matter.

The Commission releases a periodic "FCC Filings" news bulletin alerting the public to various pleadings with the Commission. Every news bulletin since the ruling was made on packet radio third party traffic has carried an announcement of some amateur or group filing a Petition of Reconsideration in an attempt to get the ruling reversed. Without

it, packet radio can not be used for any traffic - third party or not - since monitoring packet transmissions just can't be accomplished by humans.

Petitions for Reconsideration have been filed by: Donald Simon; Walter E. Miller; Edward Novak; Donald Simon; East Bay Amateur Radio Club of Richmond, CA.; Eric C. Williams; Richard K. Whipkey; Donald M. McDougall; William F. Dickson II; Tucson Amateur Packet Radio; Lawrence P. Kenney; Robert J. Keller; ARRL; Advanced Computer Controls, Inc. ...and more! By law, requests for reconsideration must be made within 30 days of a government ruling.

The League's pleading (filed February 24th), was typical. They said that the FCC should make adjustments in their rules since technology has overtaken the ability of amateurs to obey them as they are now written.

The ARRL actually filed two pleadings. The Petition for Extraordinary Relief asks the FCC to temporarily exempt packet radio from the third-party control provisions of its Report and Order on PR Docket 85-105 "to allow automatically controlled amateur packet-radio operations to continue while the FCC considers some nineteen Petitions for Reconsideration filed..."

The League's Petition for Reconsideration argues that an average 300 word-per-minute reader can't possibly monitor or supervise digital transmissions that fly by at a minimum of 1200 bits per second - 1440 words per minute. Furthermore, the ARRL let the FCC know of the chilling effect on high-technology experimenters who are building the Amateur packet-radio network.

The League acknowledged the FCC staff's stated intent to keep "hackers" and commercial interests out of amateur packet radio, not to frustrate or impede the development of the network. The corrective measure recommended by the League was to require the presence of a control operator only when "originating" a third-party communication and not for each subsequent relay throughout the network. Docket 85-105 becomes effective March 14, 1986, if not amended.

NOVICE FOREIGN BROADCAST QRM RELIEF

The FCC has acknowledged receipt (on February 27th) of an "Amendment of Section 97.7[e] to permit Limited Novice Access to 7050-7075 kHz Segment." The petition was filed by Dean Manley, KH6B of Hilo, Hawaii. It has the support of the Big Island Amateur Radio Club who countersigned the petition.

The petition seeks Novice relief from 7100-7300 kHz Region 1 and Region 3 foreign broadcast stations and their alleged jammers. Manley claims that the Novice Class segment 7100-7150 kHz is almost useless, especially at night.

An amendment is requested that allows Novice and Technician class amateurs to operate in the segment 7050-7075 kHz in areas adjacent to Region 3 specifically Alaska, Hawaii and the Caribbean Insular areas. (West of 130 degrees west longitude or south of 20 degrees north latitude.)

Manley said that the rules already allow Novices to utilize this segment in Region 1 and Region 3. "It is believed that the number of potential 7050-7075 kHz users is not sufficient to be a significant problem to users in the 48 contiguous states," he argues.

In an unrelated matter, the FCC advises that they have completed their work on the Novice enhancement proceeding. The Rule Making must now be ruled on by the Commission which is expected "via the circulation route" rather than at an open Commission meeting. We could see something on this within a month - possibly in time for (or at) the Dayton HamVention!

-.-.-

MORE ON RSGB TESTS FOR U.S. LICENSES

On January 15th we told about an inquiry we had from the Radio Society of Great Britain the national amateur radio organization in the U.K. Martin Atherton, G3ZAY, (Cambridge, England) is chairman of their HF Committee. He wondered if our VE program could test British amateurs in the United Kingdom "at an RSGB gathering" for American amateur licenses.

There are certain advantages to full U.S. licenses over a ticket received via the reciprocal route. FCC rules (§Part 97.311[b]3) limit an alien amateur operator to the privileges of their own country. The U.K.'s two-meter band does not extend past 146 MHz, thus reciprocal operation in the 146-148 MHz band (where most of our repeaters are located) is prohibited. A full U.S. license will permit such operation.

Actually we already have an accredited American testing VE team located in England. The Darley Amateur Radio Club is a 29 member ham club consisting largely of Americans stationed in North Yorkshire. Several of their British members are also interested in obtaining American licenses. The club is sponsoring ham classes this Spring towards this end. We will coordinate the testing.

The VE team is made up of Larry Ledlow (NA5E/GØCQW), Gerald Bliss (K6SMH-/GØCLY) and Thomas Kenimer (WB4NWC-/GØCMD). We have put them in contact with the R.S.G.B.

The FCC rules call for U.S. mailing and transmitting locations to be indicated on the FCC Form 610. We questioned the FCC on this and we were informed that "Any alien who is not a representative of his/her government may apply for an FCC amateur license. ...the mailing address must be one where Commission mail will be received by the licensee."

We were cautioned that the cost of FCC processing/issuance of licenses and maintaining records is ultimately borne by the taxpayer and that applications should not be encouraged that "are unnecessary or frivolous" in nature.

On accrediting aliens holding FCC licenses as volunteer examiners for other aliens desiring to be tested, the FCC advised that the rules do not prohibit this. We have given the go-ahead to our VE team in Harrogate, England, and to the R.S.G.B.

-.-.-

NEW VEC INSTRUCTIONS ISSUED BY FCC

The FCC has released new instructions

March 15, 1986

to all VEC's. The newest version is dated February 14, 1986, and supercedes the December 4, 1985, edition.

The only change is a requirement that all VEC records be maintained "until more experience is gained. Possibly a retention period can be established after which old records can be destroyed."

Meanwhile, Gordon Girton, W6NLG, of the Sunnyvale VEC (California) and Secretary-Treasurer of CARE, the Chicago based Council for Amateur Radio Examining, Inc., has filed a petition with the Commission suggesting a specific retention period for VEC records. He suggests the following:

- (1.) One year retention period for all examination records passed or failed for one year including answer sheets, code credit and interim permit records.
- (2.) Maintain reimbursement and expense records for three years.
- (3.) Do not maintain copies of certification records and FCC Form 610's forwarded to the FCC in Gettysburg.

HAM INSTRUCTORS, THE MISSING LINK....

Gordon West, WB6NOA, nationally known amateur radio educator says that "Instructors" have been sorely neglected over the past few years! "A shrinking ham radio community could mean the loss of additional or present frequencies by the FCC," he wrote in a widely circulated eight-page bulletin he prepared promoting his new amateur radio instructor program. He said the ARRL put their instructor program on "hold" almost two years ago in a cost saving measure.

"Instructors need to literally beg for more information about current examination questions, examination procedures and the latest in rule changes regarding amateur testing." West recently visited both the League and AMECO, the number one and two license preparation material publishers, to discuss his new plan for amateur radio growth. He got their support. A postcard mailing will be made to the League's list of 7,000 instructors.

Gordon says that he also might develop a monthly newsletter to keep the ham instructor up-to-date. This newsletter might advertise some substantial money-making propositions to take care of the ham instructor's classroom expenses. He suggested calling the newsletter "HI" - for Ham Instructor. "It's not a crime or a rule violation to accept compensation for teaching classes," he said. Instructor discounts on license preparation material will also be available from the League, AMECO and West Radio.

The first issue of "HI," the ham radio instructor's newsletter, will be issued at the Dayton HamVention in April, West said.

The W5YI REPORT will do its part, too! We are offering our own low priced license preparation material to everyone - with special discounts to those VE's and instructors that buy in volume. As near as we can determine, this is the lowest priced ham test study material available in the country!

These spiral bound question and answer manuals contain **every question and multiple choice answer** in the FCC's question pool just as they appear on the tests - **word-for-word!**

Q&A MANUAL:	QUES- TIONS:	=QUANTITY 1 ea.	=PURCHASED= 5 to 9	= 10 or more
NOVICE	200	\$4.00	\$3.50	\$3.00 ea.
TECH/GEN	500	\$4.00	\$3.50	\$3.00 ea.
ADVANCED	500	\$4.00	\$3.50	\$3.00 ea.
EXTRA CL.	400	\$4.00	\$3.50	\$3.00 ea.
(Plus Postage:.....		\$1.25	75¢	50¢ ea.)
ONE OF EACH:		\$15.00	plus \$2.50	postage

The Q&A Manuals are just that. They contain every question/answer and distractor (the wrong answer in a multiple choice question) for the Novice, Technician/General, Advanced and Extra Class question pool but no discussion of the correct question. The answers are in the back of the book. The FCC provides the question ...the ARRL answers have become the defacto standard in amateur testing. Nearly every VEC uses them.

Shipped first class postage same day as we get the order. (The Novice Manual has several "ready to go" tests already prepared.)

"I am a currently licensed Extra Class amateur radio operator and wish to be a volunteer examiner. I have never had my station or operator license revoked or suspended. I do not intend to."

WOULD YOU LIKE TO BECOME A VOLUNTEER EXAMINER?
 under "The W5YI Report" Program? If so, please send a copy of your Extra Class license, this signed statement and a SASE to:

W5YI REPORT.....

Page #5

March 15, 1986

The FCC releases their VE program statistics monthly. Here are the figures for January 1986. For the first time, there were less applicants tested than for the same month a year ago.

JANUARY VE PROGRAM STATISTICS....

	<u>JANUARY 1985</u>	<u>1986</u>
No. of VEC's:	*52	*76
No. of Testing Sessions:	219	266
No. of Elements Admin.:	5,290	4,211
ARRL-VEC	53.4%	
W5YI-VEC	15.6%	
C.ALA-VEC	7.1%	
Metro-VEC	6.7%	
DeVRY-VEC	3.9%	
GLAARG-VEC	2.4%	
WCAR-VEC	1.5%	
All Others:	19.4%	
No. of Applicants Tested:	3,664	2,945
Pass/Upgrade Rate, All	51.30%	62.57%
Pass/Upgrade Rate, W5YI	58.1%	63.1%
Persons Per Session, All	14.05	12.46
Persons Per Session, W5YI	11.67	9.33
No. Elements Per Person:	1.44	1.43
No. Test Session Per VEC	4.21	3.50

* = The FCC considers ARRL, W5YI, DeVRY and Metroplex to be 13 VEC's each since VEC's are appointed on a Regional basis.

.....

AMATEUR RADIO CALL SIGNS....

issued through the first of March 1986.

Radio District	Gp."A" Extra	Gp."B" Advan.	Gp."C" Tec/Gen	Gp."D" Novice
0	NQ0V	KE0EA	N0GVY	KA0WEC
1	ND1M	KB1WX	N1DZU	KA1OCP
2	NQ2H	KD2RV	N2GDZ	KB2ADT
3	KZ3P	KC3VV	N3EUF	KA3PGF
4 (**)	AA4QR	KJ4RI	N4NOL	KB4RYW
5	WI5M	KF5JQ	N5IYF	KA5ZCV
6	WQ6T	KI6CX	N6NHF	KB6LVN
7	NS7W	KE7NQ	N7HXZ	KA7YDE
8	NQ8P	KE8DN	N8HFU	KA8YZH
9	NJ9H	KD9UW	N9FQY	KA9UXJ
N.Mariana I	AH0E	AH0AC	KH0AI	WH0AAG
Guam	AH2W	AH2BF	KH2BX	WH2AIL
Johnston Is.	AH3A	AH3AC	KH3AB	WH3AAC
Midway Is.		AH4AA	KH4AD	WH4AAF
Hawaii	(*)	AH6GU	NH6FL	WH6BHQ
Kure Is.			KH7AA	

Amer.Samoa AH8B AH8AB KH8AD WH8AAV
Wake Wilkes Peale AH9AC KH9AB WH9AAE
Alaska (*) AL7HS NL7HP WL7BJM
Virgin Is. KP2O KP2AX NP2BS WP2AER
Puerto Rico WP4P KP4JZ NP4TM WP4FCL

(Note: [*] All Group "A" call signs have been assigned in Hawaii and Alaska. Group "B" format call signs now being issued to Extra Class amateurs.

ON EXTRA CLASS CALL SIGNS....

[**] We have received some inquiries about when Group "A"/Extra Class call signs will run out in the 4th radio call district where all 2X1 (2 letter prefix, 1 letter suffix) format call signs have been assigned. Now 2 by 2's are being issued. These call signs are special Group "A" blocks - and not part of the (Advanced Class) Group "B".

The Amateur Radio Station Call Sign Assignment System was detailed in the Federal Register on April 12, 1978 (page #15325 if you want to read it in your library).

Docket 21135 was adopted on March 22, 1978, and provided for one or two letter prefixes (K, N, W, AA-AL, KA-KZ, NA-NZ and WA-WZ) and one, two and three letter suffixes to be assigned according to a system. Certain two-letter prefixes were reserved for stations outside of the continental U.S. (specifically AH, AL, KH, KL, KP, NH, NL, NP, WH, WL and WP.)

The Group "A" block assignment sequence consisted of AA-AK by one letter suffix, also KA-KZ, NA-NZ, WA-WZ and then AA-AK by a two letter suffix - in that order. AM-AZ prefixes are ITU allocated to other countries. (AM-AO to Spain, AP-AS to Pakistan, AT-AW to India, AX to Australia and AY-AZ to Argentina.)

Considering the excluded AH and AL prefixes, there are 6,760 AA-AK Group "A" 2X2 call signs. The FCC began assigning the AA-AK block in the 4th call district during May of 1984. Thus far only 434 have been assigned. At the present rate of assignment (about 20 calls a month) they won't run out for another quarter of a century!

SHOULD THE GMRS BE RESTRUCTURED?

The FCC has released their Notice of Inquiry "In the Matter of Creation of a new Consumer Radio Service." In it, the FCC says they are considering significant changes in the Part 95 General Mobile Radio Service. The NOI "is to seek public comment on the best approach to accommodate unmet personal communications needs within the two 200-kHz frequency segments now assigned to GMRS."

The petition to restructure GMRS into a spectrum efficient Personal Mobility Radio Service (PMRS) filed last June 11th by the Personal Radio Steering Group is being accepted as comments on the FCC's Notice of Inquiry. The PRSG, headed up by amateur Corwin Moore, WB8UPM, of Ann Arbor, Michigan, proposed a ten year transition of GMRS to an 86 channel narrowband FM service last June 11th. The petition was assigned RM-5058.

The NOI issued by the Commission "sets forth an alternative Consumer Radio Service which would emphasize transceivers carried on the person in order to respond to the communications needs of the contemporary citizen living and travelling in our mobile society."

BACKGROUND ON CITIZEN COMMUNICATION

Actually the Commission has been toying with the concept of unrestricted public radio communication with one another for some fifty years now! The Communications Act of 1934 encourages the wider and more effective use of radio. Before World War II, the FCC opened up choice bits of the spectrum and reserved it specifically for hams to experiment with.

The hams in turn, developed new circuits and designs that were so innovative that they found their way into commercial equipment. Mobile communications were still in its infancy when World War II started. Police radio was a novelty that few cities could afford. The corner telephone was still the main method of checking in with headquarters.

When World War II burst on the scene,

personal radio efforts were shelved and the war took precedence. Walkie-talkies made their first appearance on the battlefields!

The AM hand-helds using large batteries (and very heavy) made a big difference in tactical situations. About this same time, an avid Ohio amateur by the name of Al Gross, W8PAL, was deeply involved with miniaturization and printed circuit technology. Gross, who now lives in Sun City, Arizona, also invented the proximity fuse - a radio detonator system that sensed how close a shell had come to a target aircraft.

During the war, a super-small, low powered highly classified two-tube radio transceiver was used by the Office of Strategic Services. The OSS is the forerunner of today's CIA. OSS agents, dropped behind enemy lines, used the low-power transceivers to transmit to allied planes circling overhead. W8PAL was the developer of this tiny transceiver and the story behind it remained classified for decades after the war.

Al Gross has been hailed as the father of CB radio along with E. K. Jett, FCC Commissioner from 1944 to 1947. Jett had been thinking about a new personal radio service since the 1930's when he first joined the FCC. His appointment as a commissioner in 1944 gave him an opportunity to implement the idea.

Jett had several meetings with Al Gross, W8PAL, about the concept of UHF personal communications. Gross' UHF pocket transceiver was code-named the "Joan Eleanor" radio at the time.

A NEW CONCEPT, CB RADIO, EMERGES....

Jett was eager to tell the world about a new UHF citizen's radio service! He was limited in what he could say. On July 28, 1945, he authored an article in the Saturday Evening Post entitled "Phone me by Air" which detailed the wonders of personal radio. It is absolute must reading for every student of personal communications. (Most libraries have back issues of the Saturday Evening Post. See the July 28, 1945 issue, page #16.) Back then, his idea was akin to Buck Rogers

thinking! The transistor was not yet invented by Bell Laboratories!

Jett said the new radio service best would utilize a frequency in the 460-470 MHz band - a totally "useless" frequency back then! When the war winded down, the FCC began issuing experimental citizens radio licenses. Did you know that the first new CB licenses went to a ham! Al Gross got W10XVX and W10XVY on June 1, 1945.

Gross formed a company called the "Citizen's Radio Company" based in Cleveland and planned to manufacture CB radios as soon as he got approval from Washington. The FCC allocated the 460-470 MHz band to Class "A" CB, just as E. K. Jett anticipated they would on April 10, 1947 (Docket 6651). The first radios he made were very similar to the ones used during the war by the OSS.

CLASS "A" CB BOMBS!....

But alas, UHF radio equipment proved too expensive for the mass market and Class "A" CB ultimately became a business and commercial communications service. Noting this, the FCC reassigned some of the Class "A" spectrum to the purely business Land Mobile Service. The personal radio service that started as 50 FM channels soon became just 16 - as it remains to this day.

Class "B" CB fared no better. An offshoot of Class "A", the 10 watt service soon was reduced to 5 watts and ultimately abolished altogether ...the spectrum reallocated (Docket 11994). With Class "A" CB taken over by commercial interests and Class "B" gone, the FCC (on August 4, 1958) allocated the old 11-meter amateur band to a new Class "D" AM CB service. (Class "C" CB came in 1952 and was for the remote control of models.)

The rest is is well known history. Even though the 11-meter band was basically useless for the amateur since it was an ISM band, Class "D" CB ultimately exploded into 30 million users ...fueled by the early 1970 trucker looking for "smokey" and the gas-short public seeking gasoline. It caused the FCC a lot of enforcement grief before disintegrating in its own QRM in the late 1970's!

Somehow, the FCC never listened to Commissioner Jett - and never read his Saturday Evening Post article. He plainly said the 460 to 470 MHz was "admirably suited to the new service. ...sky waves do not have to be taken into account, day or night. The only ones that matter are those parallel to the ground." He said "the 460,000 to 470,000 kilocycle band is expected to furnish enough room for millions of users" since the communications range was reasonably short - 3 to 5 miles. Jett even foresaw repeaters He called them "relay transmitters ...that automatically pick up and repeat signals on a certain wavelength and spread them throughout the urban area."

GENERAL RADIO MOBILE SERVICE....

The Class "A" CB service was renamed and the General Mobile Radio Service emerged. The FCC says that the personal communications needs of the public remain unfulfilled and "We believe there is a need to restructure the GMRS into an affordable Consumer Radio Service. ...It appears that most of the personal communications needs ...would be most suitably addressed by a service providing two-way voice communications between persons with transceivers carried on the person." Their proposal is almost exact to the service that Jett foresaw some 40 years ago.

As envisioned by the FCC, the new Consumer Radio Service would:

- (1.) ...not duplicate those services which provide for vehicular mobile radios although "there would be nothing to prevent a person from carrying the unit into a vehicle."
- (2.) ...communications must include a reasonable degree of privacy and security from interference.
- (3.) ...should be easy to use and should have most operating functions built in to make it user transparent.
- (4.) ..."We believe an essential aspect of this service would be automatic frequency selection in lieu of frequency assignment of 'party' channels."
- (5.) ...not have a provision for telephone interconnection "...we do not view the restructured GMRS as a new cordless telephone service."

(6.) ... "We do not wish to issue individual user licenses in a new Consumer Radio Service."

(7.) ... repeaters were not ruled out.

(8.) ... FCC questioned whether personal and commercial use sharing would be possible.

(9.) ... how should the transition from GMRS to CRS be effected? How should current GMRS users be accommodated?

(10.) Comments are also wanted on:

(a.) Maximizing the number of users in the two 200-kHz bands.

(b.) Range and degree of service reliability.

(c.) Should one-way services be permitted?

(d.) Comments encouraged on accomplishing minimum channel spacing and maximizing frequency reuse and spectrum efficiency.

(e.) What voice modes should be used? AM, FM, SSB, analog, digital?

(f.) Technical parameters? transmitter/receiver requirements, frequency tolerance, harmonic/spurious attenuation, cost to manufacture and consumer to reach obtain these specifications.

(g.) ... which current technology would support narrower channels?

(h.) ... should provision for emergency channels be incorporated?

(i.) ... should provision be made for an emergency or travelers advisory service?

(j.) ... what methods can be used for assuring that non-emergency communications would not occur on these channels?

(k.) ... should current GMRS operations be grandfathered on a permanent or temporary basis?

(l.) ... will the market size be sufficient for equipment development.

(m.) ... can the equipment be manufactured in volume at reasonable cost?

(n.) ... is any bandplanning or coordinating necessary to accommodate the various uses in a restructured GMRS.

FCC Commissioner Jett appears to have been 50 years ahead of his time. His classic "Phone Me By Air" may yet come to pass using basically the same equipment and spectrum that he wrote about in 1945. Comments close on May 30, 1986.

(Action by FCC - NOI, released Feb. 5, 1986)

FAST & FURIOUS Telecommunications News

¶ "Never Say Die" Wayne Green advises that a brief ham industry meeting was held at the Miami Hamboree. Last year it was agreed that if industry could come up with \$10,000, the League would match it with another \$10,000 and a \$20,000 comic book would be produced touting amateur radio for beginners. "The ante on this is still light." Wayne says he is going to get ham radio growing again, "I don't have a record of failure, only of success — and I don't intend to break this record now," he writes in a letter sent out to potential '73 Magazine' advertisers. Green said ad rate cutting is as destructive as discounting is for ham stores but he vowed to match any special ad rate in any amateur magazine. He also wants to call an industry meeting at the Dayton HamVention for 1 p.m. on Thursday.

¶ Washington Watch... The QCWA sent in Reply Comments on "Rules to Allow Auxiliary Operation on All Amateur Frequencies, Except 431-433 MHz." David Popkin, W2CC, sent in a Petition for Reconsideration on an "Amendment of the Amateur Rules to Prohibit Disqualified Persons from Participating in Third Party Communications." Three Amateurs have submitted comments on "Rules to Allow Novice Privileges in the 6 Meter Band."

¶ Telephone Trivia. An up-to-date phone book is even harder to get in the Soviet Union than a telephone! There is only one directory for every six phones in Leningrad and the latest phone book published in Arkhangelsk (population 408,000) was published some seven years ago!

¶ Bill Malicoat, NI5Y, says that Kansas State University isn't the only college giving credit for ham radio classes. They are offered at Oklahoma State University, too. He should know. He is the instructor.

¶ "Count yourself lucky" Department. The next application deadline for amateur examinations in Canada is March 19th for the April 16th test date. Only four amateur radio operator test sessions are held a year in Canada. The annual license fee is \$26 (\$20 if you already hold a ticket) plus a testing fee for each portion of the examination taken.

¶ Apparently the Reagan administration's "Radio Marti" is doing well. Marti is the AM broadcast band "news" service that is beamed to Cuba to break the Castro government's monopoly of information. Marti's air time has now been increased to 17½ hours per day. Cuban radio stations have adopted a livelier format to counteract Marti. Starting this month, relatives that have left the island can broadcast messages back to their relatives still in Cuba. U.S. broadcasters feared a massive "radio war" against the Voice of America broadcasts, but so far the interference is minimal.

¶ Did you know that Australia is planning a law against RFI-prone consumer electronic items? It will be a crime "down under" to supply, possess or use equipment that does not meet minimum immunity standards.

¶ Everyone is wondering just what the Commission will look like come this summer. FCC Chairman Mark Fowler's term expires June 30 and no one seems to know if he will seek re-appointment. He isn't saying. Rumors have it that if Fowler goes, Commissioners Dennis Patrick or Mimi Dawson could get it.

¶ M/A-Com stands to make a bundle on their \$399 Videocipher II consumer satellite descrambler now that HBO has opted for their satellite signal encryption system. In an effort to stimulate the backyard dish business, many TVRO dealers are simply giving away the descrambler to sell a system. M/A-Com can't make them fast enough and is licensing other firms to manufacture them on a royalty basis! M/A-Com banks \$325 million if just half the nation's home satellite systems purchase a descrambler. Cinemax, Showtime, The Disney Channel, ESPN, The Movie Channel and all of the super channels (WOR/WGN/WTBS) will scramble this year!

¶ The next phase has satellite delivered programming attempting to market their service direct to home earth station owners. All sorts of networks and plans are brewing. HBO and Cinemax are selling direct (\$12.95 a month each/\$19.95 for both) - Turner plans to grant distribution rights to cable affiliates. (Cost for CNN and Headline news will be \$25 a year to dish owners.) It will cost the back-

yarder a fortune to get what they used to receive at no cost! High power DBS, direct broadcast satellite to small home dishes, may yet catch on now that there is no advantage in paying big bucks for a big dish system.

¶ Ex-ham radio maker, the R.L. Drake Company, has a new home satellite receiver with an automatic built-in antenna positioner. A push of a single button and the unit remembers up to nine satellites and transponders. A "parental lock-out" feature keeps the kiddies from viewing the late night moan and groaners.

¶ Portland, Oregon, city council is considering adoption of a new RFR (radio frequency radiation) standard that is five times more stringent than that of federally recognized ANSI (American National Standards Institute.) Broadcasters there very concerned!

¶ Two congressmen (DeConcini, D-AZ, and English, D-OK) said that drug runners have compiled a list of radio frequencies used by President Reagan, the Secret Service, FBI and other federal, military, state and local law enforcement agencies and the list could undermine national security. The list of thousands of sensitive radio frequencies was found during a recent South Florida Drug raid.

¶ You have probably heard about Ku-band and C-Band satellite programming and didn't know the difference. The Ku-band is from 12-14 GHz, C-Band: 4-6 GHz. C-band is traditionally the preferred band because of its superior propagation characteristics. Ku-band is susceptible to weather induced outages.

¶ Things not going well for Osborne Computer. They are liquidating for a second time. Commodore also in trouble, but they averted Chapter 11 by obtaining a one month extension of their debt payment. Their Amiga micro has not lived up to expectations and Atari (headed up by ex-Commodore president Jack Tramiel) is providing stiff competition.

¶ The FCC, slated for a slight funding increase for fiscal 1987, may never see it. Reagan proposed adding \$1.9 million to FCC budget bringing it to \$96.4 million. Gramm-Rudman-Hollings will probably take it away!

¶ Flock of Woodpeckers Coming? The U.S. Air Force has announced that it plans more over-the-horizon long-range radar installations to detect enemy aircraft and missiles approaching the U.S. from the south. The latest will be located at two sites in Minnesota or the Dakotas. O-T-H system in Maine nearing completion. Additional HF radar locations set for California, Oregon and Alaska.

¶ Theft of Service is a big headache to cable companies. Michigan mail order firm, C&D Electronics, agreed in an FTC consent decree not to sell decoders, converters and descramblers allegedly used for unauthorized reception of cable programming. In California, the Los Angeles city attorney is planning an undercover "sting" operation to find and arrest dealers of illegal cable service. Leads are being provided by cable operators who will help pay for the campaign. They will seek jail terms for first offenses. Nationally, illegal hookups account for 12%. Los Angeles theft of service is conservatively fixed at 18% where cable company imposters peddle counterfeit boxes door-to-door.

¶ Private citizens aren't the only ones illegally receiving pay video. Sports oriented bars and lounges with satellite dishes are tapping into pay sports satellite network feeds. Professional teams under local blackout restrictions find that their signals are plucked off of the satellite. Some bars even advertise their availability. The networks claim that satellite feeds are private transmissions. The bars say that they merely are receiving signals freely floating in the atmosphere.

¶ The FCC has amended §Part 15 to allow operation of low power communication devices (LPCD's) in the 1.6 to 10 MHz band in response to a petition by the Knogo Corporation. The intended effect is to provide additional frequencies for LPCD's including wide-band and/or swept frequency systems. New rules are effective March 3rd. The ARRL had recommended that the operation of LPCD's (such as door openers, intrusion detectors and anti-shoplifting equipment) be restricted to commercial applications since the potential for interference increases in residential areas due to proximity of sensitive amateur radio receivers. The FCC did not agree.

TWENTY CITATIONS ISSUED FLORIDA HAMS!

The story is just developing ...facts are still sketchy, but twenty Florida amateurs have been issued FCC Notices of Violations for infractions of "§Part 97.110 reference §97.3[b]" which prohibits amateur radio station communications for business purposes. Another amateur said the violations were for §Part 97.112 which prohibits "communication for material compensation, direct or indirect, paid or unpaid." It could be that different amateurs got cited for various - but somewhat similar - breaches of the amateur rules.

What is known, however, is that members of the eighty-meter Florida Trader's Net which meets every Sunday morning on 3985 kHz were cited by the Fort Lauderdale FCC monitoring station for using their amateur stations with a "pecuniary or business interest."

One involved amateur who did not wish to be named said the general feeling seems to be that amateur gear "swap nets" - even though by individuals - may not be legal if a selling price is suggested. The amateurs cited apparently gave a price that they would sell their surplus gear for.

Another amateur said he thought that perhaps some of the ones served might have been commercial dealers but "most were not. We really don't know. They very well could be. There are amateurs out there selling every week that the net is in operation..." We were told that one of the amateurs involved is an attorney who, acting as the spokesman, was getting in touch with his congressman.

A phone call to the Ft. Lauderdale monitoring station did confirm the issuance of the citations. The engineer that I spoke to said it was a case of rule interpretation. "We have gotten a lot of calls on this... Anything that I would say would further confuse the issue." He refused to make an official statement and referred us to the Engineer-in-Charge who we could not contact before our publishing deadline. "Swap Nets" on amateur radio are very common. You might want to refrain from talking "price" until the FCC makes a ruling on what is - and is not - legal.